It is my belief that it is in the best interest of the radio community both professional and amateur not to restrict the development and research of cognitive radios and software defined radios in so much that it may stifle future technologies.

Having said that, I don't see the increase in output power in the license free bands (900Mhz, 2.4Ghz, 5.8Ghz and 24Ghz) being a productive means of increasing the line of sight range for communications. The use of gain directional antennae and removing or modifying the current limit on effective radiated power should be the first step to increasing communications distance.

It must also be noted that if this is to be primarily used for rural communications, it should be so ruled that the transceiver located within a municipality with which a rural "client" is connecting should not be allowed the additional power mentioned in this proposal.

Many wireless point to point services exist in the unlicensed 2.4Ghz band that make use of access points in metropolitan areas and that serve suburban and rural communities. Transceivers in metropolitan areas operating at a higher output power would inherently raise the noise floor across the band being used. Spread Spectrum or not, the increase in noise will be come an issue eventually.

Respectfully Submitted,
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